Journal



of the

Nottingham Astronomical Society May 2013

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Thursday, 2nd May British Geological Survey Nicker Hill, Keyworth 8 pm (doors open at 7.30pm)

Tonight we welcome

Frazer Pearce

of the University of Nottingham

who will be speaking on

'Life, the Universe and Everything'

RECENT NEWS STORIES ON THE WEB

Follow these links for interesting current news:

- NASA's Cassini spacecraft finds evidence of meteors colliding with Saturn's rings
 <u>http://www.sciencedaily.com/releases/2013/04/130425144654.htm</u>
- Close-up views of a spectacular storm on Saturn <u>http://www.universetoday.com/101836/saturn-storms-suck-zone-shown-in-spectacular-cassini-shots/#more-101836</u>

• Entire galaxies feel the heat of new-born stars http://phys.org/news/2013-04-entire-galaxies-newborn-stars-star.html

Scientists bounce laser beams off the old Soviet Lunokhod rover on the Moon

http://www.space.com/20865-soviet-moon-rover-lunokhod-laser.html

• Studies of a neutron star orbiting a white dwarf provide confirmation of the General Theory of Relativity

http://esciencenews.com/articles/2013/04/25/einsteins.gravity.theory.passes.t oughest.test.yet



Compiled by Roy Gretton



All times given below are in British Summer Time (BST)

PHASES OF THE MOON

Last Quarter	12:14 pm on May 2 nd
New Moon	1:28 am on May 10 th
First Quarter	5:35 am on May 18^{th}
Full Moon	$5:25$ am on May 25^{th}

This month the Moon is closest to the Earth on the 26th, and furthest on the 13th.

(Data from the BAA Handbook)

THE PLANETS

Mercury begins May as a morning object (but unobservable), passes through superior conjunction on the 11th, and emerges as a favourably-placed evening object later in the month. By the end of May the planet will be more than 25 degrees north of the celestial equator, and will be 8 degrees above the northwestern horizon at the close of civil twilight (the time when the Sun is 6 degrees below the horizon). This will be the best evening apparition of Mercury in the whole of 2013.

Venus slowly emerges as an evening object as May progresses. On the last day of the month the planet will be about 4 degrees above the northwestern horizon at the close of civil twilight.



Looking northwest at 10 pm on May 31st

Mars is unobservable this month.

Jupiter, still observable in the northwest after sunset at the beginning of May, disappears into the solar glow as the month progresses.

Saturn, just past opposition as May commences, is as well-placed for observation as it will be for the rest pf this year. Moving close to the border of Libra and Virgo, the planet will never be very high in our sky, due to its southerly declination (about 11 degrees south of the celestial equator). However, make the most of it this year: the situation will get even worse in the coming years, with Saturn sinking even further into the southern sky. That said, Saturn

is a beautiful object through a telescope, with the ring system tilted at about 18 degrees to our line of sight. Look out for Saturn's largest satellite, Titan, which will be found due north of the planet on May 15th and again on the 31st.

Uranus and Neptune are virtually unobservable this month.

METEORS

The **Eta Aquariids** reach their maximum activity on May 5^{th} , when 40 events per hour may be expected under the most favourable conditions (which do not apply in the UK, due to the radiant of the shower being well to the south).

VARIABLE STAR: Algol

There are **two** minima of this **eclipsing binary** visible from the UK this month. They occur on May 13^{th} (2:35 am), and on the 15^{th} (11:25 pm. The star dims from its normal brightness (magnitude 2.1) magnitude 3.4 over a period of 4.8 hours, and then returns to its normal brightness in a similar length of time.

COMET 2011 L4 (PanSTARRS)

The comet continues its northerly progress throughout the month, passing through the constellations of Cepheus and Ursa Minor.

Consult <u>http://www.ast.cam.ac.uk/~jds/11l4.ukl</u> for detailed night-by-night predictions, and <u>http://www.astronomy.com/panstarrs</u> for a finder chart.

The Nottingham Astronomical Society: E - SERVICES

Whether or not you are a NAS member, you can keep up to date with details of the Society's meetings and other events by visiting the NAS website: www.nottinghamastro.org.uk

NAS on Facebook

You are welcome to connect with other members and friends of the NAS on Facebook by going to: http://www.facebook.com/nas.org.uk

NAS Journal e-mailing list

To register for your monthly e-mailed copy of the NAS Journal, just e-mail <u>secretary@nottinghamastro.org.uk</u>

You don't have to be a Society member to take advantage of this service.

Monthly Meetings of the Nottingham Astronomical Society

Our programme for this year is shown below. Don't forget to check our website: <u>www.nottinghamastro.org.uk</u> for the latest information about the Society's meetings and for further information about the talks and speakers.

Our meetings are held on the **FIRST THURSDAY** of the month,

at the British Geological Survey, Keyworth, Notts. NG12 5GG

doors open at 7:30pm for 8pm start.

Thursday, 2nd May 2013

Talk: 'Life, the Universe and Everything'

Frazer Pearce

University of Nottingham

Thursday, 6th June 2013

Talk : " Exploring Jupiter's Icy Moons – the next ESA Mission to Jupiter "

Dr. Emma Bunce

University of Leicester

Thursday, 4th July 2013

Talk: "Matter Between the Stars the Physics and Chemistry of the Interstellar Medium"

Dr Paul Ruffle

Jodrell Bank Centre for Astrophysics – University of Manchester

August 2013 - Summer Break - No Meeting

Thursday, 5th September 2013

Members' Evening (visitors welcome)

A short talk by one of our members, followed by an Astro Quiz.

Thursday 3rd October 2013 Talk: " Astrophotography – and How It's Done " Nik Szymanek					
The British amateur astronomer and prolific astrophotographer					
Thursday 7th November 2013 2013 Annual General Meeting					
Thursday 5th December 2013 Dramatic Lecture : "Into the Cosmic Ocean " The dream of travel to the stars					
Andrew Lound Andy is a popular public presenter and UK Coordinator for the Planetary Society					

ADVERTISEMENTS

FOR SALE

Skywatcher Evostar 120 Refractor on EQ5 Mount

Almost new. Motor drives to both axes with hand controller Heavy duty metal tripod. 50mm right-angle finder. 2" star-diagonal. Two eyepieces plus solar filter (using Baader Solar Film) £450

Beacon Hill 12-inch f/5.5 Newtonian Tube Assembly

Used but in good working order. Mirrors by Nichol Optical. Coatings in good condition. Includes finderscope and primary mirror cover. Tube clamps for equatorial mount also available if wanted.

£300

Phone David on: 0115 9602266 or e-mail: <u>david_lukehurst@o2.co.uk</u>

FOR SALE

- **Orion** (USA) 6x26 correct image **finderscope**, complete with bracket **£15**
- **Telescope Optics Book** by Rutten and van Venrooij (hardback), in excellent condition

£12

Contact BARRY WINSTON

Home tel no 0115 989 4239 mobile no. 07507 863 689.

Email <u>barrywinston@yahoo.com</u>

WANTED: Eyepieces

I am currently looking for 2nd hand Televue eyepieces to compliment my TV 101.

I am looking for mainly Nagler eyepieces but would be interested in other models in the Televue too.

I am situated close to Alfreton, Derbyshire. Thank you.

Paul Davies

Email: paul@graphic.demon.co.uk

Nottingham Astronomical Society

Affiliated to the British Astronomical Association Member of the Federation of Astronomical Societies Member of the Society for Popular Astronomy Supporters of the Campaign for Dark Skies Registered Charity No: 1066645

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<u>CAMPAIGN FOR DARK SKIES</u> <u>REPRESENTATIVE:</u> Barrie Chacksfield email: b.chacksfield@gmail.com

ORDINARY COMMITTEE MEMBERS:

Kevin Greally David Anderson Victoria Jolly Phil Heesom

Meetings

Our meetings, often with an illustrated talk by a guest speaker, are held on the first Thursday of each month (except in August) at:

The British Geological Survey Nicker Hill Keyworth Nottingham NG12 5GG

Doors open	7.30pm
Meetings start	8.00pm
Meetings end	10.00pm

Meetings are open to the public, and visitors are always welcome to attend.

Annual subscriptions 2013

Full£25Concessions£12.50Joint rate for partners£37.50

Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

If you would like more information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Secretary <u>secretary@nottinghamastro.org.uk</u> or speak to any NAS committee member at one of the regular monthly meetings. A membership application form is inside this issue of the Journal.

The Nottingham Astronomical Society

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NOTTINGHAM ASTRONOMICAL SOCIETY

Founded in 1946 for all interested in astronomy Affiliated to the British Astronomical Association Member of the Federation of Astronomical Societies Registered Charity No. 1066645 Member of the Society for Popular Astronomy Supporter of the Campaign for Dark Skies



Membership application and Gift Aid declaration

Title:

Full name:

Full home address:

Postcode:

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e-mail address:

Subscription rate:	Full Concession	£25.00 £12.50	(year)	£12.50 £6.25	(half year)
	Partnership	£37.50		£18.75	

Concession = under-18 / full-time student / unemployed and receiving benefits Partnership = two members living together as a couple at the same address

I wish my subscriptions to be eligible for Gift Aid Yes / No

Gift Aid declaration

(HMRC reference XR32048)

I want Nottingham Astronomical Society to treat all subscriptions and donations that I make from the date of this declaration as Gift Aid donations, until I notify you otherwise.

I pay an amount of UK Income Tax and/or Capital Gains Tax at least equal to the tax that Nottingham Astronomical Society reclaims on my donations in the appropriate tax year.

Signature:

Date: